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EOSDIS Core System Project

ECS Project Training Material Volume 18: Advanced Production Planning and Processing

July 1999

Raytheon Systems Company
Upper Marlboro, Maryland

ECS Project Training Material

Volume 18: Advanced Production Planning and Processing

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RESPONSIBLE ENGINEER

Ralph E. Fuller /s/	7/12/99
<hr/>	
Ralph E. Fuller	Date
EOSDIS Core System Project	

SUBMITTED BY

Gary W. Sloan /s/ for	7/13/99
<hr/>	
Tom Hickey, M&O Manager	Date
EOSDIS Core System Project	

Raytheon Systems Company
Upper Marlboro, Maryland

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Preface

This document is a contract deliverable with an approval code of 3. As such, it does not require formal Government approval. This document is delivered for information only, but is subject to approval as meeting contractual requirements.

Any questions should be addressed to:

Data Management Office
The ECS Project Office
Raytheon Systems Company
1616 McCormick Dr.
Upper Marlboro, MD 20774-5301

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Abstract

This is Volume 18 of a series of lessons containing the training material for Release 5A of the Earth Observing System Data and Information System (EOSDIS) Core System (ECS). This lesson provides extensive practice in the processes involved in developing a resource plan for a site; scheduling resources; creating, modifying, and implementing production requests and production plans; and monitoring the processing of data processing requests.

Keywords: training, instructional design, course objective, resource plan, resource definition, resource reservation request, production request, production plan, data processing request, production, planning, processing.

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Introduction

Identification

Training Material Volume 18 is part of Contract Data Requirements List (CDRL) Item 129, whose requirements are specified in Data Item Description (DID) 625/OP3 and is a required deliverable under the Earth Observing System Data and Information System (EOSDIS) Core System (ECS), Contract (NAS5-60000).

Scope

Training Material Volume 18 provides extensive practice in the procedures by which ECS personnel prepare resource reservation requests, resource planners prepare resource plans, and the production team prepares production plans and monitors production processing. This lesson is designed to provide the operations staff with sufficient skills to satisfy all lesson objectives.

Purpose

The purpose of this Student Guide is to provide a detailed course of instruction that forms the basis for understanding production planning and processing. Lesson objectives are developed and will be used to guide the flow of instruction for this lesson. The lesson objectives will serve as the basis for verifying that all lesson topics are contained within this Student Guide.

Status and Schedule

This lesson module provides detailed information about training for Release 5A. Subsequent revisions will be submitted as needed.

Organization

This document is organized as follows:

Introduction:	The Introduction presents the document identification, scope, purpose, and organization.
Related Documentation:	Related Documentation identifies parent, applicable and information documents associated with this document.
Student Guide:	The Student Guide identifies the core elements of this lesson. All Lesson Objectives and associated topics are included.
Slide Presentation:	There is no Slide Presentation associated with this lesson.

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Related Documentation

Parent Document

The parent document is the document from which this ECS Training Material's scope and content are derived.

423-41-01	Goddard Space Flight Center, EOSDIS Core System (ECS) Statement of Work
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Applicable Documents

The following documents are referenced within this ECS Training Material, or are directly applicable, or contain policies or other directive matters that are binding upon the content of this document:

420-05-03	Goddard Space Flight Center, Earth Observing System (EOS) Performance Assurance Requirements for the EOSDIS Core System (ECS)
423-41-02	Goddard Space Flight Center, Functional and Performance Requirements Specification for the Earth Observing System Data and Information System (EOSDIS) Core System (ECS)

Information Documents

Information Documents Referenced

The following documents are referenced herein and amplify or clarify the information presented in this document. These documents are not binding on the content of the ECS Training Material.

535-TIP-CPT-001	Goddard Space Flight Center, Mission Operations and Data Systems Directorate (MO&DSD) Technical Information Program Networks Technical Training Facility, Contractor-Provided Training Specification
609-CD-500	Release 5A Operations Tools Manual for the ECS Project
611-CD-500	Release 5A Mission Operation Procedures for the ECS Project

Information Documents Not Referenced

The following documents, although not referenced herein and/or not directly applicable, do amplify or clarify the information presented in this document. These documents are not binding on the content of the ECS Training Material.

220-TP-001	Operations Scenarios - ECS Release B.0 Impacts
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305-CD-020	Release B SDPS/CSMS System Design Specification Overview for the ECS Project
305-CD-021	Release B SDPS Client Subsystem Design Specification for the ECS Project
305-CD-022	Release B SDPS Interoperability Subsystem Design Specification for the ECS Project
305-CD-023	Release B SDPS Data Management Subsystem Design Specification for the ECS Project
305-CD-024	Release B SDPS Data Server Subsystem Design Specification for the ECS Project
305-CD-025	Release B SDPS Ingest Subsystem Design Specification [for the ECS Project]
305-CD-026	Release B SDPS Planning Subsystem Design Specification for the ECS Project
305-CD-027	Release B SDPS Data Processing Subsystem Design Specification for the ECS Project
305-CD-028	Release B CSMS Communications Subsystem Design Specification for the ECS Project
305-CD-029	Release B CSMS System Management Subsystem Design Specification for the ECS Project
305-CD-030	Release B GSFC DAAC Design Specification for the ECS Project
305-CD-031	Release B Langley DAAC Design Specification for the ECS Project
305-CD-033	Release B EDC DAAC Design Specification for the ECS Project
305-CD-034	Release B ASF DAAC Design Specification for the ECS Project
305-CD-035	Release B NSIDC DAAC Design Specification for the ECS Project
305-CD-036	Release B JPL PO.DAAC Design Specification for the ECS Project
305-CD-037	Release B ORNL DAAC Design Specification for the ECS Project
305-CD-038	Release B System Monitoring and Coordination Center Design Specification for the ECS Project
305-CD-039	Release B Data Dictionary Subsystem Design Specification for the ECS Project
601-CD-001	Maintenance and Operations Management Plan for the ECS Project
604-CD-001	Operations Concept for the ECS Project: Part 1-- ECS Overview
604-CD-002	Operations Concept for the ECS Project: Part 2B -- ECS Release B

605-CD-002	Release B SDPS/CSMS Operations Scenarios for the ECS Project
607-CD-001	ECS Maintenance and Operations Position Descriptions
500-1002	Goddard Space Flight Center, Network and Mission Operations Support (NMOS) Certification Program, 1/90

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Advanced Production Planning and Processing Overview

Lesson Overview

This lesson will provide you with extensive practice in the processes by which ECS personnel prepare resource reservation requests, the resource planner prepares resource plans, the production planner prepares production plans, and the production monitors monitor production processing. The processes included in the lesson apply primarily to resource planners, production planners, and production monitors. The procedures involved in resource planning, production planning, and production processing include such tasks as preparing, validating, approving, and committing resource reservation requests; reviewing resource timelines; defining resources; preparing production requests; preparing production plans; and monitoring data processing.

Lesson Objectives

Overall Objective - The overall objective of the Advanced Production Planning and Processing lesson is for Maintenance and Operations (M&O) personnel to develop proficiency in the procedures that apply to resource planning, production planning, and production processing operations for the Earth Observing System (EOS) Data and Information System (EOSDIS) Core System (ECS).

Condition - The student will be given oral or written information and requirements for performing resource planning, production planning, and production processing activities; access to the Planning and Data Processing Subsystems; a copy of 609-CD-500-001, *Release 5A Operations Tools Manual for the ECS Project*; and a copy of 611-CD-500-001, *Mission Operation Procedures for the ECS Project*.

Standard - The student will perform resource planning, production planning, and production processing activities in accordance with the prescribed procedures without error.

Specific Objective 1 - The student will perform the steps involved in launching resource planning applications.

Condition - The student will be given a statement of the requirements for launching resource planning applications, access to the Planning Subsystem (through a workstation or X terminal), a copy of 609-CD-500-001, *Release 5A Operations Tools Manual for the ECS Project*, and a copy of 611-CD-500-001, *Mission Operation Procedures for the ECS Project*.

Standard - The student will perform without error the steps involved in launching resource planning applications in accordance with the applicable procedure.

Specific Objective 2 - The student will perform the steps involved in shutting down resource planning applications.

Condition - The student will be given a statement of the requirements for shutting down resource planning applications, access to the Planning Subsystem (through a workstation or X terminal), a copy of 609-CD-500-001, *Release 5A Operations Tools Manual for the ECS Project*, and a copy of 611-CD-500-001, *Mission Operation Procedures for the ECS Project*.

Standard - The student will perform without error the steps involved in shutting down resource planning applications in accordance with the applicable procedure.

Specific Objective 3 - The student will perform the steps involved in synchronizing resource listings.

Condition - The student will be given a statement of the requirements for synchronizing resource listings, access to the Planning Subsystem (through a workstation or X terminal), a copy of 609-CD-500-001, *Release 5A Operations Tools Manual for the ECS Project*, and a copy of 611-CD-500-001, *Mission Operation Procedures for the ECS Project*.

Standard - The student will perform without error the steps involved in synchronizing resource listings in accordance with the applicable procedure.

Specific Objective 4 - The student will perform the steps involved in determining the actual processing resources to be added to the resource planning list.

Condition - The student will be given a statement of the requirements for determining the actual processing resources to be added to the resource planning list, access to the Planning Subsystem (through a workstation or X terminal), a copy of 609-CD-500-001, *Release 5A Operations Tools Manual for the ECS Project*, and a copy of 611-CD-500-001, *Mission Operation Procedures for the ECS Project*.

Standard - The student will perform without error the steps involved in determining the actual processing resources to be added to the resource planning list in accordance with the applicable procedure.

Specific Objective 5 - The student will perform the steps involved in adding resources to the resource planning list.

Condition - The student will be given a statement of the requirements for adding resources to the resource planning list, access to the Planning Subsystem (through a workstation or X terminal), a copy of 609-CD-500-001, *Release 5A Operations Tools Manual for the ECS Project*, and a copy of 611-CD-500-001, *Mission Operation Procedures for the ECS Project*.

Standard - The student will perform without error the steps involved in adding resources to the resource planning list in accordance with the applicable procedure.

Specific Objective 6 - The student will perform the steps involved in modifying resources on the resource planning list.

Condition - The student will be given a statement of the requirements for modifying resources on the resource planning list, access to the Planning Subsystem (through a workstation or X terminal), a copy of 609-CD-500-001, *Release 5A Operations Tools Manual for the ECS Project*, and a copy of 611-CD-500-001, *Mission Operation Procedures for the ECS Project*.

Standard - The student will perform without error the steps involved in modifying resources on the resource planning list in accordance with the applicable procedure.

Specific Objective 7 - The student will perform the steps involved in deleting resources from the resource planning list.

Condition - The student will be given a statement of the requirements for deleting resources from the resource planning list, access to the Planning Subsystem (through a workstation or X terminal), a copy of 609-CD-500-001, *Release 5A Operations Tools Manual for the ECS Project*, and a copy of 611-CD-500-001, *Mission Operation Procedures for the ECS Project*.

Standard - The student will perform without error the steps involved in deleting resources from the resource planning list in accordance with the applicable procedure.

Specific Objective 8 - The student will perform the steps involved in tuning system resources.

Condition - The student will be given a statement of the requirements for tuning system resources, access to the Planning and Data Processing Subsystems (through a workstation or X terminal), a copy of 609-CD-500-001, *Release 5A Operations Tools Manual for the ECS Project*, and a copy of 611-CD-500-001, *Mission Operation Procedures for the ECS Project*.

Standard - The student will perform without error the steps involved in tuning system resources in accordance with the applicable procedure.

Specific Objective 9 - The student will perform the steps involved in preparing a resource reservation request.

Condition - The student will be given a statement of the requirements for preparing a resource reservation request, access to the Planning Subsystem (through a workstation or X terminal), a copy of 609-CD-500-001, *Release 5A Operations Tools Manual for the ECS Project*, and a copy of 611-CD-500-001, *Mission Operation Procedures for the ECS Project*.

Standard - The student will perform without error the steps involved in preparing a resource reservation request in accordance with the applicable procedure.

Specific Objective 10 - The student will perform the steps involved in editing/modifying a resource reservation request.

Condition - The student will be given a statement of the requirements for editing/modifying a resource reservation request, access to the Planning Subsystem (through a workstation or X terminal), a copy of 609-CD-500-001, *Release 5A Operations Tools Manual for the ECS Project*, and a copy of 611-CD-500-001, *Mission Operation Procedures for the ECS Project*.

Standard - The student will perform without error the steps involved in editing/modifying a resource reservation request in accordance with the applicable procedure.

Specific Objective 11 - The student will perform the steps involved in validating or rejecting a resource reservation request.

Condition - The student will be given a statement of the requirements for validating or rejecting a resource reservation request, access to the Planning Subsystem (through a workstation or X terminal), a copy of 609-CD-500-001, *Release 5A Operations Tools Manual for the ECS Project*, and a copy of 611-CD-500-001, *Mission Operation Procedures for the ECS Project*.

Standard - The student will perform without error the steps involved in validating or rejecting a resource reservation request in accordance with the applicable procedure.

Specific Objective 12 - The student will perform the steps involved in approving resource reservation requests.

Condition - The student will be given a statement of the requirements for approving resource reservation requests, access to the Planning Subsystem (through a workstation or X terminal), a copy of 609-CD-500-001, *Release 5A Operations Tools Manual for the ECS Project*, and a copy of 611-CD-500-001, *Mission Operation Procedures for the ECS Project*.

Standard - The student will perform without error the steps involved in approving resource reservation requests in accordance with the applicable procedure.

Specific Objective 13 - The student will perform the steps involved in committing resource reservation requests.

Condition - The student will be given a statement of the requirements for committing resource reservation requests, access to the Planning Subsystem (through a workstation or X terminal), a copy of 609-CD-500-001, *Release 5A Operations Tools Manual for the ECS Project*, and a copy of 611-CD-500-001, *Mission Operation Procedures for the ECS Project*.

Standard - The student will perform without error the steps involved in committing resource reservation requests in accordance with the applicable procedure.

Specific Objective 14 - The student will perform the steps involved in deleting resource reservation requests.

Condition - The student will be given a statement of the requirements for deleting resource reservation requests, access to the Planning Subsystem (through a workstation or X terminal), a copy of 609-CD-500-001, *Release 5A Operations Tools Manual for the ECS Project*, and a copy of 611-CD-500-001, *Mission Operation Procedures for the ECS Project*.

Standard - The student will perform without error the steps involved in deleting resource reservation requests in accordance with the applicable procedure.

Specific Objective 15 - The student will perform the steps involved in reviewing a resource timeline.

Condition - The student will be given a statement of the requirements for reviewing a resource timeline, access to the Planning Subsystem (through a workstation or X terminal), a copy of 609-CD-500-001, *Release 5A Operations Tools Manual for the ECS Project*, and a copy of 611-CD-500-001, *Mission Operation Procedures for the ECS Project*.

Standard - The student will perform without error the steps involved in reviewing a resource timeline in accordance with the applicable procedure.

Specific Objective 16 - The student will perform the steps involved in troubleshooting resource-planning problems.

Condition - The student will be given a statement of resource planning trouble symptoms, access to the Planning Subsystem (through a workstation or X terminal), a copy of 609-CD-500-001, *Release 5A Operations Tools Manual for the ECS Project*, and a copy of 611-CD-500-001, *Mission Operation Procedures for the ECS Project*.

Standard - The student will perform without error the steps involved in troubleshooting resource planning problems in accordance with the applicable procedure.

Specific Objective 17 - The student will perform the steps involved in launching the production request editor.

Condition - The student will be given a statement of the requirements for launching the production request editor, access to the Planning Subsystem (through a workstation or X terminal), a copy of 609-CD-500-001, *Release 5A Operations Tools Manual for the ECS Project*, and a copy of 611-CD-500-001, *Mission Operation Procedures for the ECS Project*.

Standard - The student will perform without error the steps involved in launching the production request editor in accordance with the applicable procedure.

Specific Objective 18 - The student will perform the steps involved in creating new production requests.

Condition - The student will be given a statement of the requirements for preparing new production requests, access to the Planning Subsystem (through a workstation or X terminal), a copy of 609-CD-500-001, *Release 5A Operations Tools Manual for the ECS Project*, and a copy of 611-CD-500-001, *Mission Operation Procedures for the ECS Project*.

Standard - The student will perform without error the steps involved in preparing new production requests in accordance with the applicable procedure.

Specific Objective 19 - The student will perform the steps involved in deleting production requests.

Condition - The student will be given a statement of the requirements for deleting production requests, access to the Planning Subsystem (through a workstation or X terminal), a copy of 609-CD-500-001, *Release 5A Operations Tools Manual for the ECS Project*, and a copy of 611-CD-500-001, *Mission Operation Procedures for the ECS Project*.

Standard - The student will perform without error the steps involved in deleting production requests in accordance with the applicable procedure.

Specific Objective 20 - The student will perform the steps involved in reviewing data processing requests.

Condition - The student will be given a statement of the requirements for reviewing data processing requests, access to the Planning Subsystem (through a workstation or X terminal), a copy of 609-CD-500-001, *Release 5A Operations Tools Manual for the ECS Project*, and a copy of 611-CD-500-001, *Mission Operation Procedures for the ECS Project*.

Standard - The student will perform without error the steps involved in reviewing data processing requests in accordance with the applicable procedure.

Specific Objective 21 - The student will perform the steps involved in deleting data processing requests.

Condition - The student will be given a statement of the requirements for deleting data processing requests, access to the Planning Subsystem (through a workstation or X terminal), a copy of 609-CD-500-001, *Release 5A Operations Tools Manual for the ECS Project*, and a copy of 611-CD-500-001, *Mission Operation Procedures for the ECS Project*.

Standard - The student will perform without error the steps involved in deleting data processing requests in accordance with the applicable procedure.

Specific Objective 22 - The student will perform the steps involved in submitting and withdrawing subscriptions using the subscription editor.

Condition - The student will be given a statement of the requirements for submitting and withdrawing subscriptions using the subscription editor, access to the Planning Subsystem (through a workstation or X terminal), a copy of 609-CD-500-001, *Release 5A Operations Tools Manual for the ECS Project*, and a copy of 611-CD-500-001, *Mission Operation Procedures for the ECS Project*.

Standard - The student will perform without error the steps involved in submitting and withdrawing subscriptions using the subscription editor in accordance with the applicable procedure.

Specific Objective 23 - The student will perform the steps involved in launching planning workbench-related GUIs.

Condition - The student will be given a statement of the requirements for launching planning workbench-related GUIs, access to the Planning Subsystem (through a workstation or X terminal), a copy of 609-CD-500-001, *Release 5A Operations Tools Manual for the ECS Project*, and a copy of 611-CD-500-001, *Mission Operation Procedures for the ECS Project*.

Standard - The student will perform without error the steps involved in launching planning workbench-related GUIs in accordance with the applicable procedure.

Specific Objective 24 - The student will perform the steps involved in defining a production strategy.

Condition - The student will be given a statement of the requirements for defining a production strategy, access to the Planning Subsystem (through a workstation or X terminal), a copy of 609-CD-500-001, *Release 5A Operations Tools Manual for the ECS Project*, and a copy of 611-CD-500-001, *Mission Operation Procedures for the ECS Project*.

Standard - The student will perform without error the steps involved in defining a production strategy in accordance with the applicable procedure.

Specific Objective 25 - The student will perform the steps involved in creating a new production plan.

Condition - The student will be given a statement of the requirements for preparing a new production plan, access to the Planning Subsystem (through a workstation or X terminal), a copy of 609-CD-500-001, *Release 5A Operations Tools Manual for the ECS Project*, and a copy of 611-CD-500-001, *Mission Operation Procedures for the ECS Project*.

Standard - The student will perform without error the steps involved in preparing a new production plan in accordance with the applicable procedure.

Specific Objective 26 - The student will perform the steps involved in reviewing a production plan timeline.

Condition - The student will be given a statement of the requirements for reviewing a production plan timeline, access to the Planning Subsystem (through a workstation or X terminal), a copy of 609-CD-500-001, *Release 5A Operations Tools Manual for the ECS Project*, and a copy of 611-CD-500-001, *Mission Operation Procedures for the ECS Project*.

Standard - The student will perform without error the steps involved in reviewing a production plan timeline in accordance with the applicable procedure.

Specific Objective 27 - The student will perform the steps involved in troubleshooting production planning problems.

Condition - The student will be given a statement of production planning trouble symptoms, access to the Planning Subsystem (through a workstation or X terminal), a copy of 609-CD-500-001, *Release 5A Operations Tools Manual for the ECS Project*, and a copy of 611-CD-500-001, *Mission Operation Procedures for the ECS Project*.

Standard - The student will perform without error the steps involved in troubleshooting production planning problems in accordance with the applicable procedure.

Specific Objective 28 - The student will perform the steps involved in launching the AutoSys GUI Control Panel.

Condition - The student will be given a statement of the requirements for launching the AutoSys GUI Control Panel, access to the Data Processing Subsystem (through a workstation or X terminal), a copy of 609-CD-500-001, *Release 5A Operations Tools Manual for the ECS Project*, and a copy of 611-CD-500-001, *Mission Operation Procedures for the ECS Project*.

Standard - The student will perform without error the steps involved in launching the AutoSys GUI Control Panel in accordance with the applicable procedure.

Specific Objective 29 - The student will perform the steps involved in monitoring production processing.

Condition - The student will be given a statement of the requirements for monitoring production processing, access to the Data Processing Subsystem (through a workstation or X terminal), a copy of 609-CD-500-001, *Release 5A Operations Tools Manual for the ECS Project*, and a copy of 611-CD-500-001, *Mission Operation Procedures for the ECS Project*.

Standard - The student will perform without error the steps involved in monitoring production processing in accordance with the applicable procedure.

Specific Objective 30 - The student will perform the steps involved in viewing entries in the Planning and Data Processing Subsystems' (PDPS) database using isql.

Condition - The student will be given a statement of the requirements for viewing PDPS database entries using isql, access to the Data Processing Subsystem (through a workstation or X terminal), a copy of 609-CD-500-001, *Release 5A Operations Tools Manual for the ECS Project*, and a copy of 611-CD-500-001, *Mission Operation Procedures for the ECS Project*.

Standard - The student will perform without error the steps involved in viewing PDPS database entries using isql in accordance with the applicable procedure.

Specific Objective 31 - The student will perform the steps involved in troubleshooting processing problems.

Condition - The student will be given a statement of processing trouble symptoms, access to the Data Processing Subsystem (through a workstation or X terminal), a copy of 609-CD-500-001, *Release 5A Operations Tools Manual for the ECS Project*, and a copy of 611-CD-500-001, *Mission Operation Procedures for the ECS Project*.

Standard - The student will perform without error the steps involved in troubleshooting processing problems in accordance with the applicable procedure.

Specific Objective 32 - The student will perform the steps involved in viewing science product granules using EOSView.

Condition - The student will be given a statement of the requirements for viewing science product granules using EOSView, access to the Data Processing and Data Server Subsystems (through a workstation or X terminal), a copy of 609-CD-500-001, *Release 5A Operations Tools Manual for the ECS Project*, and a copy of 611-CD-500-001, *Mission Operation Procedures for the ECS Project*.

Standard - The student will perform without error the steps involved in viewing science product granules using EOSView in accordance with the applicable procedure.

Specific Objective 33 - The student will perform the steps involved in reviewing production history granules.

Condition - The student will be given a statement of the requirements for reviewing production history granules, access to the Data Processing and Data Server Subsystems (through a workstation or X terminal), a copy of 609-CD-500-001, *Release 5A Operations Tools Manual for the ECS Project*, and a copy of 611-CD-500-001, *Mission Operation Procedures for the ECS Project*.

Standard - The student will perform without error the steps involved in reviewing production history granules in accordance with the applicable procedure.

Specific Objective 34 - The student will perform the steps involved in reviewing failpage granules.

Condition - The student will be given a statement of the requirements for reviewing failpage granules, access to the Data Processing and Data Server Subsystems (through a workstation or X terminal), a copy of 609-CD-500-001, *Release 5A Operations Tools Manual for the ECS Project*, and a copy of 611-CD-500-001, *Mission Operation Procedures for the ECS Project*.

Standard - The student will perform without error the steps involved in reviewing failpage granules in accordance with the applicable procedure.

Importance

This lesson applies to students who will be Resource Planners, Production Planners or Production Monitors. The lesson will provide them with the knowledge and skills needed when performing their assigned tasks. Those tasks include (among other things) defining production resources, managing the resource reservation process, preparing production requests, preparing production plans and monitoring DPR processing. The lesson provides extensive practice in performing the activities. Consequently, the students will become aware of what tasks they will be performing on the job and how to accomplish those tasks.

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Practical Exercise

Introduction

This lesson consists entirely of practical exercise, which is designed to give the students practice in resource planning, production planning, and production processing activities.

Equipment and Materials

One ECS workstation per student.

Statement of the requirements for the exercise.

Release 5A Operations Tools Manual for the ECS Project, 609-CD-500-001, one copy per student.

Mission Operation Procedures for the ECS Project, 611-CD-500-001, one copy per student.

Launching Resource Planning Applications

The exercise involves launching resource planning applications. The exercise begins with a student acting in the role of a resource user receiving the necessary information/requirements for launching resource reservation applications. The student launches the Message Handler, Resource Model, System Name Server, Resource Editor, and Resource Scheduler consistent with the requirements.

Perform the following steps:

1. Launch the Message Handler, Resource Model, and System Name Server.
2. Launch the Resource Editor.
3. Launch the Resource Scheduler.

Shutting Down Resource Planning Applications

The exercise involves shutting down resource planning applications. The exercise begins with a student acting in the role of a resource user receiving the necessary information/requirements for shutting down resource reservation applications. The student shuts down the Resource Scheduler and the Resource Editor, and cleans up background processes consistent with the requirements.

Perform the following steps:

1. Shut down the Resource Scheduler, Resource Editor, Message Handler, Resource Model, and System Name Server.
2. Verify that all resource planning applications have in fact shut down.

Synchronizing Resource Listings

The exercise involves synchronizing resource listings. The exercise begins with a student acting in the role of Resource Planner receiving the necessary information/requirements for synchronizing resource listings. The student synchronizes resource listings as specified in the requirements.

Perform the following steps:

1. Access the Resource Editor.
2. Synchronize resource listings.

Determining Actual Processing Resources to be Added to the Resource Planning List

The exercise involves determining the actual processing resources to be added to the resource planning list. The exercise begins with a student acting in the role of Resource Planner receiving the necessary information/requirements for determining actual processing resources to be added to the resource planning list. The student determines the resources to be added to the resource planning list as specified in the requirements.

Perform the following steps:

1. Log in to the applicable Science Processor.
2. Change to the disk mount point (subdirectory).
3. Identify the disk name and size by changing to the disk mount point and typing `df -k .` (including the dot).
4. Identify the number of processors (CPUs) and amount of RAM (type `hinv`).
5. Launch Netscape.
6. Identify the Operating System by selecting the as-built file name corresponding to the desired host at the relevant DAAC (e.g., `x0spg01.asbuilt.html`).
7. Log in to the applicable Queuing Server host.
8. Identify the AutoSys instance (in the “autouser” directory).

Adding Resources to the Resource Planning List

The exercise involves adding resources to the resource planning list. The exercise begins with a student acting in the role of Resource Planner receiving the necessary information/requirements for adding resources to the resource planning list. The student adds resources to the resource planning list as specified in the requirements.

Perform the following steps:

1. Access the Resource Editor.
2. Access the appropriate detail GUI(s) for the type(s) of resource(s) to be added.
3. Define the type(s) of resource(s) to be added as specified in the requirements.
4. Save the added resource(s) in the resource planning list.

Modifying Resources on the Resource Planning List

The exercise involves modifying resources on the resource planning list. The exercise begins with a student acting in the role of Resource Planner receiving the necessary information/requirements for modifying resources on the resource planning list. The student modifies resources on the resource planning list as specified in the requirements.

Perform the following steps:

1. Access the Resource Editor.
2. Access the appropriate detail GUI(s) for the type(s) of resource(s) to be modified.
3. Modify the definition of the resource(s) as specified in the requirements.
4. Save the modifications to the resource planning list.

Deleting Resources from the Resource Planning List

The exercise involves deleting resources from the resource planning list. The exercise begins with a student acting in the role of Resource Planner receiving the necessary information/requirements for deleting resources from the resource planning list. The student deletes resources from the resource planning list as specified in the requirements.

Perform the following steps:

1. Access the Resource Editor.
2. Highlight the resource(s) to be deleted.
3. Delete the resource(s) as specified in the requirements.

Tuning System Resources

The exercise involves tuning system resources. The exercise begins with students acting in the roles of Resource Planner and Production Monitor receiving the necessary information/requirements for tuning system resources. The students tune system resources as specified in the requirements.

Perform the following steps:

1. Log in to the applicable Science Processor.
2. Identify the disk name and size.
3. Identify the number of processors (CPUs) and amount of RAM.
4. Log in to the Planning Workstation host.
5. Launch the Resource Editor.
6. Define resource types as specified in the requirements.
7. Log in to the Queuing Server host.
8. Modify the Job Management configuration file as specified in the requirements.

Creating Resource Reservation Requests

The exercise involves the preparation of resource reservation requests. The exercise begins with a student acting in the role of a resource user receiving the necessary information/requirements for creating resource reservation requests. The student prepares resource reservation requests that are consistent with the requirements.

Perform the following steps:

1. Access the Resource Scheduler.
2. Prepare a resource reservation request that is consistent with the written or stated requirements.
3. Save the resource reservation request.
4. Repeat Steps 2 and 3 as necessary to meet the specified requirements.

Editing/Modifying Resource Reservation Requests

The exercise requires the editing of resource reservation requests. The exercise begins with a student acting in the role of a resource user receiving the necessary information/requirements for editing existing resource reservation requests. The student modifies the resource reservation requests consistent with the requirements.

Perform the following steps:

1. Access the Resource Scheduler.
2. Select one of the resource reservation requests to be modified.
3. Make resource reservation request modifications consistent with the written or stated requirements.
4. Save the modified resource reservation request.
5. Repeat Steps 2 through 4 as necessary to meet the specified requirements.

Validating or Rejecting Resource Reservation Requests

The exercise involves the validation or rejection of resource reservation requests. The exercise begins with a student acting in the role of “sponsor” receiving the necessary information/requirements for validating or rejecting resource reservation requests. The student validates or rejects resource reservation requests as specified in the requirements.

Perform the following steps:

1. Access the Resource Scheduler.
2. Access one of the specified resource reservation requests.
3. Evaluate the entries in the resource reservation request fields.
4. Validate or reject the resource reservation request as specified in the requirements.
5. Save the modified resource reservation request.
6. Repeat Steps 2 through 5 as necessary to meet the specified requirements.

Approving Resource Reservation Requests

The exercise involves approving resource reservation requests. The exercise begins with a student acting in the role of Resource Planner receiving the necessary information/requirements for approving a resource reservation request. The student approves a resource reservation request consistent with the requirements.

Perform the following steps:

1. Access the Resource Scheduler.
2. Access the specified resource reservation request.
3. Approve the resource reservation request as specified in the requirements.
4. Save the modified resource reservation request.

Committing Resource Reservation Requests

The exercise involves committing resource reservation requests. The exercise begins with a student acting in the role of Resource Manager receiving the necessary information/requirements for committing resource reservation requests. The student commits resource reservation requests consistent with the requirements.

Perform the following steps:

1. Access the Resource Scheduler.
2. Access the specified resource reservation request(s).
3. Commit the resource reservation request(s) as specified in the requirements.

Deleting a Resource Reservation Request

The exercise involves deleting a resource reservation request. The exercise begins with a student acting in the role of Resource Planner receiving the necessary information/requirements for deleting a resource reservation request. The student deletes the resource reservation request consistent with the requirements.

Perform the following steps:

1. Access the Resource Scheduler.
2. Access the specified resource reservation request.
3. Delete the resource reservation request as specified in the requirements.

Reviewing a Resource Timeline

The exercise involves reviewing a resource timeline. The exercise begins with a student acting in the role of Resource Planner receiving the necessary information/requirements for reviewing specified resource reservation requests on a resource timeline. The student reviews the specified resource timeline and responds to questions concerning timeline characteristics.

Perform the following steps:

1. Access the Resource Scheduler.
2. Access the resource timeline.
3. Adjust the resource timeline display as necessary to view the specified resource reservation requests.
4. Review the resource timeline.
5. Respond without error to questions concerning the resource timeline.

Troubleshooting Resource Planning Problems

The exercise involves troubleshooting Resource Planning problems. The exercise begins with a student acting in the role of Resource Planner receiving the necessary trouble symptom information and requirements for troubleshooting the problem(s). The student reviews the specified trouble symptoms, takes action to correct the problem(s), and responds to questions concerning the possible cause(s).

Perform the following steps:

1. Review the trouble symptoms.
2. Check resource planning log files as necessary.
3. Take action to correct the problem(s).
4. Respond without error to questions concerning the possible cause(s).

Launching the Production Request Editor

The exercise involves launching the production request editor using UNIX commands. The exercise begins with a student acting in the role of Production Planner recognizing the need to launch the production request editor. The student launches the production request editor as specified in the requirements.

Perform the following steps:

1. Access the command shell.
2. Log in to the Planning Subsystem host.
3. Set the necessary environmental variables.
4. Start the Production Request Editor GUI in the appropriate mode.

Creating New Production Requests

The exercise involves the preparation of new production requests. The exercise begins with a student acting in the role of Production Planner receiving the necessary information/requirements for creating new production requests. The student prepares new production requests that are consistent with the requirements.

Perform the following steps:

1. Access the Production Request Editor.
2. Prepare a new production request that is consistent with the written or stated requirements.
3. Save the new production request.
4. Repeat Steps 2 and 3 as necessary to meet the specified requirements.

Deleting Production Requests

The exercise involves deleting production requests. The exercise begins with a student acting in the role of Production Planner receiving the necessary information/requirements for deleting existing production requests. The student deletes the production requests as specified in the requirements.

Perform the following steps:

1. Select the PR List tab on the Production Request Editor GUI.
2. Select the production request to be deleted from those listed.
3. Delete the production request.
4. Repeat Steps 2 and 3 as necessary to meet the specified requirements.

Reviewing Data Processing Requests

The exercise involves reviewing data processing requests. The exercise begins with a student acting in the role of Production Planner being directed to review specific data processing requests to determine specified characteristics. The student reviews the data processing requests consistent with the requirements.

Perform the following steps:

1. Select the DPR List tab on the Production Request Editor GUI.
2. Select a Production Request from the list on the option button.
3. Select a DPR from the list displayed.
4. Open the DPR.
5. Respond without error to questions concerning the characteristics of the DPR.

Deleting Data Processing Requests

The exercise involves deleting data processing requests. The exercise begins with a student acting in the role of Production Planner being directed to delete specific data processing requests. The student deletes the data processing requests as specified in the requirements.

Perform the following steps:

1. Select the DPR List tab on the Production Request Editor GUI.
2. Select the appropriate Production Request from the list on the option button.
3. Select the DPR to be deleted from the list displayed.
4. Delete the DPR.
5. Repeat Steps 2 through 4 as necessary to meet the specified requirements.

Submitting and Withdrawing Subscriptions

The exercise involves submitting and withdrawing subscriptions using the Subscription Editor. The exercise begins with a student acting in the role of Production Planner being directed to submit and withdraw subscriptions using the Subscription Editor. The student submits and withdraws subscriptions as specified in the requirements.

Perform the following steps:

1. Log in to the Planning/Management Workstation.
2. Launch the Subscription Editor.
3. Respond to prompts to submit or withdraw the specified subscription.
4. Repeat Steps 2 and 3 as necessary to meet the specified requirements.

Launching Planning Workbench-Related GUIs

The exercise involves launching planning workbench-related GUIs using UNIX commands. The exercise begins with a student acting in the role of Production Planner recognizing the need to launch planning workbench-related GUIs. The student launches planning workbench-related GUIs as specified in the requirements.

Perform the following steps:

1. Access the command shell.
2. Log-in to the Planning Subsystem host.
3. Set the necessary environmental variables.
4. Start the Planning Workbench GUI in the appropriate mode.
5. Start the Production Strategies GUI in the appropriate mode.

Defining a Production Strategy

The exercise involves the preparation of a production strategy. The exercise begins with a student acting in the role of Production Planner receiving the necessary information/requirements for creating a production strategy. The student prepares a production strategy that is consistent with the requirements.

Perform the following steps:

1. Select priorities for the values for PR Type, User Type, and PGE Type.
2. Type weights for the preceding three DPR attributes (as needed).
3. Type a weight in the User Selected field.
4. Click on the Normalize button.
5. Type delta priority for Inter-DAAC Delta (if needed).

6. Type delta priority for Late Start Delta (if needed).
7. Save the Production Strategy.

Creating a New Production Plan

The exercise involves the preparation of a new production plan. The exercise begins with a student acting in the role of Production Planner receiving the necessary information/requirements for creating a new production plan. The student prepares a new production plan that is consistent with the requirements.

Perform the following steps:

1. Access the Planning Workbench.
2. Prepare a new production plan that is consistent with the written or stated requirements.
3. Save the new production plan.
4. Activate the plan (if specified in the requirements).

Reviewing a Plan Timeline

The exercise involves reviewing a production plan timeline. The exercise begins with a student acting in the role of Production Planner receiving the necessary information/requirements for reviewing a production plan timeline. The student reviews the specified production plan timeline and responds to questions concerning timeline characteristics.

Perform the following steps:

1. Access the specified production planning timeline.
2. Review the specified production planning timeline.
3. Respond without error to questions concerning the production planning timeline.

Troubleshooting Production Planning Problems

The exercise involves troubleshooting production planning problems. The exercise begins with a student acting in the role of Production Planner receiving the necessary trouble symptom information and requirements for troubleshooting the problem(s). The student reviews the specified trouble symptoms, takes action to correct the problem(s), and responds to questions concerning the possible cause(s).

Perform the following steps:

1. Review the trouble symptoms.
2. Check the status of relevant hosts/servers as necessary.
3. Check log files as necessary.
4. Take action to correct the problem(s).

5. Respond without error to questions concerning the possible cause(s).

Launching the AutoSys GUI Control Panel

The exercise involves launching the AutoSys GUI Control Panel using UNIX commands. The exercise begins with a student acting in the role of Production Monitor recognizing the need to launch the AutoSys GUI Control Panel. The student launches the AutoSys GUI Control Panel as specified in the requirements.

Perform the following steps:

1. Access the command shell.
2. Log-in to the Data Processing Subsystem host.
3. Set the necessary environmental variables.
4. Source the appropriate file.
5. Start the appropriate instance of AutoSys.

Monitoring Production Processing

The exercise involves monitoring production processing. The exercise begins with a student acting in the role of Production Monitor receiving the necessary information/requirements for monitoring production processing. The student monitors production processing consistent with the requirements.

Perform the following steps:

1. Launch the AutoSys GUI Control Panel.
2. Review hardware status as specified in the written or stated requirements.
3. Review DPR dependencies as specified in the written or stated requirements.
4. Review the DPR production timeline as specified in the written or stated requirements.
5. Review and configure alarms as necessary.
6. Review job activities as specified in the written or stated requirements.
7. Modify job status as specified in the written or stated requirements.
8. Review the activity log as specified in the written or stated requirements.
9. Review the job dependency log as specified in the written or stated requirements.
10. Respond without error to questions concerning events occurring in production processing.

Viewing PDPS Database Entries Using isql

The exercise involves viewing PDPS database entries using isql. The exercise begins with a student acting in the role of Production Monitor receiving the necessary information/requirements for viewing PDPS database entries using isql. The student views PDPS database entries using isql as specified in the requirements.

Perform the following steps:

1. Access the command shell.
2. Start isql.
3. Enter isql commands to retrieve the database information as specified in the requirements.
4. Respond without error to questions concerning the database information.

Troubleshooting Processing Problems

The exercise involves troubleshooting production processing problems. The exercise begins with a student acting in the role of Production Monitor receiving the necessary trouble symptom information and requirements for troubleshooting the problem(s). The student reviews the specified trouble symptoms, takes action to correct the problem(s), and responds to questions concerning the possible cause(s).

Perform the following steps:

1. Review the trouble symptoms.
2. Check the status of relevant hosts/servers as necessary.
3. Check log files as necessary.
4. Take action to correct the problem(s).
5. Respond without error to questions concerning the possible cause(s).

Viewing Product Granules Using EOSView

The exercise involves viewing product granules using EOSView. The exercise begins with a student acting in the role of Production Monitor recognizing the need to view product granules using EOSView. The student views product granules using EOSView as specified in the requirements.

Perform the following steps:

1. Access the command shell.
2. Log in to the appropriate host.
3. Set the necessary environmental variables.
4. Start either the QA Monitor GUI or the DSS Driver in the appropriate mode.

5. Retrieve the specified granules.
6. Launch EOSView.
7. Review the specified granules using EOSView.
8. Respond without error to questions concerning the specified granules.

Reviewing Production History Granules

The exercise involves reviewing production history granules. The exercise begins with a student acting in the role of Production Monitor receiving the necessary information/requirements for reviewing production history granules. The student reviews production history granules as specified in the requirements.

Perform the following steps:

1. Access the command shell.
2. Log in to the appropriate host.
3. Set the necessary environmental variables.
4. Start either the QA Monitor GUI or the DSS Driver in the appropriate mode.
5. Retrieve the specified production history granules.
6. Review the specified production history granules
7. Respond without error to questions concerning the specified production history granules.

Reviewing failpge Granules

The exercise involves reviewing failpge granules. The exercise begins with a student acting in the role of Production Monitor receiving the necessary information/requirements for reviewing failpge granules. The student reviews failpge granules as specified in the requirements.

Perform the following steps:

1. Access the command shell.
2. Log in to the appropriate host.
3. Set the necessary environmental variables.
4. Start the DSS Driver in the appropriate mode.
5. Retrieve the specified failpge granules.
6. Review the specified failpge granules
7. Respond without error to questions concerning the specified failpge granules.

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